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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/416,098

10/12/1999

TERESA H. MENG

MR2919-17

5713

4586 7590 07/09/2008

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EXAMINER

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ART UNIT

PAPER NUMBER

2611

MAIL DATE

DELIVERY MODE

07/09/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/416,098  
Filing Date: October 12, 1999  
Appellant(s): MENG ET AL.

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David Klein  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 4/17/2008 appealing from the Office action mailed 8/7/2007.

**(1) Real Party in Interest**

A statement identifying the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

None

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1, 4-5, 8-9, 15, 18-19, 22-23, 29, 31 and 34-35 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claimed subject matter: “using a common carrier frequency and a common sampling frequency; adjusting the common carrier and sampling frequencies; correct errors in the carrier frequency and sampling frequency; a frequency lock loop and a delay lock loop; a frequency shift block and a timing acquisition unit” was not found in the original disclosure and therefore considered as new matter. The original disclosure clearly stated that a first embodiment for digital correction of carrier frequency offsets (page 8, L8-9; Fig. 2); and a second preferred embodiment for digital correction of sampling frequency offset (page 10, L16-17; Fig. 4). Even though the transmitter can

adjust carrier frequency and/or sampling frequency (page 18), “and” does not mean together and simultaneously. The application never discloses how carrier frequency and sampling frequency adjustment operate together, nor depict in drawing of such structure.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 4-5, 8-9, 15, 18-19, 22-23, 29, 31 and 34-35 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Evidence that claims 1, 4-5, 8-9, 15, 18-19, 22-23, 29, 31 and 34-35 fail(s) to correspond in scope with that which applicant(s) regard as the invention. The original disclosure clearly stated that a first embodiment for digital correction of carrier frequency offsets (page 8, L8-9; Fig. 2); and a second preferred embodiment for digital correction of sampling frequency offset (page 10, L16-17; Fig. 4)”. These two different embodiments are improper to combine together in a single claim.

#### **(10) Response to Argument**

A. With respect to claims 1, 4-5, 8-9, 15, 18-19, 22-23, 29, 31 and 34-35

The applicant argues that originally filed specification describes the invention as a combination of carrier and sampling frequency offset correction. As shown in Fig. 1, and described in the specification “and/or” shows that the scope of the invention was contemplated as encompassing carrier frequency offset correction in and of itself, sampling frequency offset correction in and of it self, and the combination of both carrier

frequency offset correction and sampling frequency offset correction. Therefore, claims are fully enabled by the specification.

Response — Applicant's general statement in the specification: "transmitter can adjust its carrier frequency and/or sampling frequency" lacks evidence and sufficient support for the carrier frequency offset and sampling frequency offset correction occur together at the same time. Applicant never described in detail nor showed in drawing how carrier frequency offset and sampling frequency offset are corrected together. Word "and" is defined as *in addition to* according to dictionary, but it does not necessary mean together and simultaneously. Even if it did for the sake of argument, the system's operation will be changed and no longer operate the same way as applicant's invention. Applicant points to Fig. 1 for showing the combination of both carrier frequency and sampling frequency offset correction. Applicant also argues that the specification discloses that each of the remote unit corrects the frequency offsets (page 7, line 13-17). Examiner disagrees. Fig.1 merely depicts bi-directional communication between a based station and multiple remote stations. It is just a general picture of communication system as a whole. One of ordinary skill in the art would not derive to a conclusion that the communication system corrects carrier frequency offset and sampling frequency offset by studying Fig. 1. Examiner acknowledges that instant application is directed to eliminate carrier frequency offsets and sampling frequency offsets in a communication system. However, the carrier frequency offsets and sampling frequency offsets corrections are separately performed and individually taught. These two frequency offsets corrections are not feasible in combination. This is evident by studying the

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original specification of the application. Throughout the originally filed specification, applicant describes in details how to correct carrier frequency offsets in a first embodiment (page 8, line 8-9; Fig. 2), and correct sampling frequency offsets in a second embodiment (page 10, line 16-17; Fig. 4). These two embodiments are different and independent. No where in the specification clearly discloses these embodiments as a whole in the communication system. Moreover, none of the originally filed drawings shows these embodiments in structure as a whole. As mentioned above, Fig. 2 illustrates carrier frequency offsets correction; while Fig. 4 illustrates sampling frequency offsets correction. Both figures show receive signal from base station at the input, and decoded data at output. Applicant never filed any drawings that depict Fig. 2 and Fig. 4 combined together. Even if applicant argues that the two figures are combinable, Examiner disagrees. Each figure's decoded data output depends on its data decoding scheme, independently. If one forces to combine the two figures, the two frequency offsets corrections will process in parallel. The received signal from base station will input to carrier frequency shift (204) and timing acquisition unit (402), but there will be two decoded data outputs (208 and 406). One in the ordinary skill in the art would realize that the two decoded data output would produce a different result than one decoded data output. It is unknown how to combine the two decoded data output into one. The operation of applicant's communication system will be changed. The applicant never provides any description how the embodiments shown in Figures 2 and 4 may be combined together to generate a single decoded data output with both carrier and sampling frequency offset are corrected together. Therefore, the applicant only

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described one embodiment for carrier frequency offsets correction and another embodiment for sampling frequency offsets correct. But the applicant does not describe one embodiment that corrects both carrier and sampling frequency offsets together as claimed. Applicant failed to clearly describe the claimed subject matters in the originally specification and drawing. The claimed subject matters are considered as new matters. Applicant also failed to distinctly claiming the subject matter which applicant regards as invention. Therefore, as stated with all the reasons above, applicant's argument with respect to the rejections under 35 U.S.C. 112, first and second paragraphs is not persuasive.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.



Respectfully submitted,

Eva Puente

/E. Y. P./

Examiner, Art Unit 2611

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